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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,560	02/06/2002	Susumu Kato	219201US0	2615

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ALEXANDRIA, VA 22314

EXAMINER

CLARDY, S

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 05/19/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,560

Applicant(s)

Susumu et al

Examiner

S. Mark Clardy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Mar 3, 2003
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7 6) ☐ Other:

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Claims 1-13 and new claims 14-24 are pending in this application.

Applicants' claims are drawn to solid agrochemical compositions comprising a fragment of a fiber crop (kenaf, claim 4) and a liquid or dissolved/dispersed agrochemically active agent (claims 1-8, 15-19, 22-24), methods of making them (claims 9-10), and a method of applying the compositions (claim 11, 14, 20, 21). Claims 12 and 13 are drawn to compositions comprising the fiber crop fragments with an oil absorbency of 100 or more¹, and a particle size no greater than 2 mm.

Misspellings and multiply dependent claims have been corrected.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 12 and 13 are rejected under 35 U.S.C. 102(a), (b), and (e) as being anticipated by Grether (US 5,415,736).

¹See paragraph 34: measured as grams of dibutyl phthalate absorbed per 100 g of absorbent

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Grether teaches natural fiber containing sheet material comprising kenaf (col 5, lines 10-13), which is described as being processed into three fractions: long-staple fibers, short-staple fibers, and fines (col 5, line 56, to col 6, line 5). The fines fraction is described in Example 2 as having a size ranging from 0.5 to 2 mm (col 6, lines 60-65). The oil absorption capacity would appear to be a characteristic of the fines fraction.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Medoff et al (US 6,207,729) and Oza et al (US 6,528,569).

Medoff et al teach cellulosic and lignocellulosic compositions with absorbent properties which are useful for pollution control, as well as for delivery of active agents such as agrochemicals (abstract; col 2, lines 51-57) such as fertilizers, herbicides, or pesticides (col 1, lines 57-60; also col 3, line 57 to col 4, line 6). Examples of the cellulosic material include wood and wood products, kenaf, rice hulls, stem plants, bast and core fibers, corn cobs, and coconut hair (col 3, lines 8-16). Additional components may include additives such as chalk, silica, talc, etc. (col 5, lines 10-15).

Oza et al teach water soluble or water dispersible compositions comprising agrochemical electrolytes such as glyphosate (columns 1-2), a film forming polymer such as polyvinyl alcohol (col 3, lines 11-13), and a solid filler such as talc, silica, or cellulosic fibers such as wood fiber (col

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2, lines 59-65), with highly adsorptive fillers being preferred. The product may also be coated with the film-forming polymer or contained within a water soluble bag of the same polymeric material (col 5, lines 11-20).

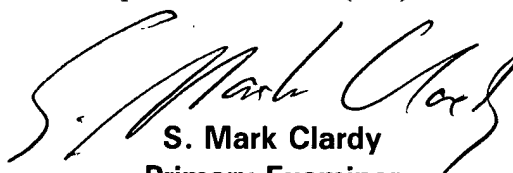
One of ordinary skill in the art would be motivated to combine these references because they disclose solid formulations comprising a solid fibrous core and an absorbed active agent.

Thus it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have combined applicants' materials in a single granular composition because Medoff et al teach the utility of absorbing agrochemicals on a fibrous substrate such as kenaf, and because Oza et al teach that such fiber based agrochemical compositions may further comprise a polymeric component, or be further contained in a polymeric water soluble bag. Determination of appropriate fiber particle sizes is within the skill level of the ordinary artisan.

No unobvious or unexpected results are noted; no claim is allowed.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103c and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is (703) 308-4550.


S. Mark Clardy
Primary Examiner
AU 1616

May 15, 2003